

POLICY BRIEF

Making Education Resilient in the Pacific to Prevent Learning Losses



Take-home module learning has been one of the primary modes of instruction in Pacific island countries during the school closures. Photo credit: ADB.

The effect of COVID-19 school closures on students and their future calls for digital systems that ensure learning continues even in a disaster.

Published: 10 December 2021

Introduction

One of the sectors hit hardest by the coronavirus disease (COVID-19) pandemic is education. Movement restrictions imposed by governments across the world have included the suspension of physical class meetings, which required a shift to distance learning to minimize the disruption to education.

Data shows that the extent of school closures has been less among the Pacific developing member countries (DMCs) of the Asian Development Bank (ADB) than in other parts of developing Asia. However, the disruption still affected the learning of students and might even impact their future productivity. Losses incurred depended on the resilience of education systems and their readiness to offer alternative modes of learning.

To guard against future disruptions, Pacific DMCs need to address gaps in information and communications technology (ICT) to support distance learning and ensure that students have access to quality education.

COVID-19 and School Closures in Asia and the Pacific

The pandemic led to school disruptions in many parts of the world.

By June 2021, schools had been closed for about 1 year or more in 13 of 46 economies in developing Asia. Some of these economies implemented full closure while others did partial closures, where schools were closed only in certain regions or for some grade levels and age groups. In many countries, schools have combined reduced class time with distance learning.

Meanwhile, the inherent geographical remoteness of Pacific DMCs, combined with their governments' prompt action to close ports of entry to their territories, have kept the number of COVID-19 cases low compared to the rest of developing Asia and allowed most schools to stay open. Schools in the subregion have been fully closed for an average of 32 days and partially closed for an average of 13 days only through the calendar year 2020. Most of the countries started closing schools in March—April 2020. However, schools had resumed operations in all Pacific DMCs by July 2020, whether in full capacity or in part.

Distance Learning Strategies and Challenges

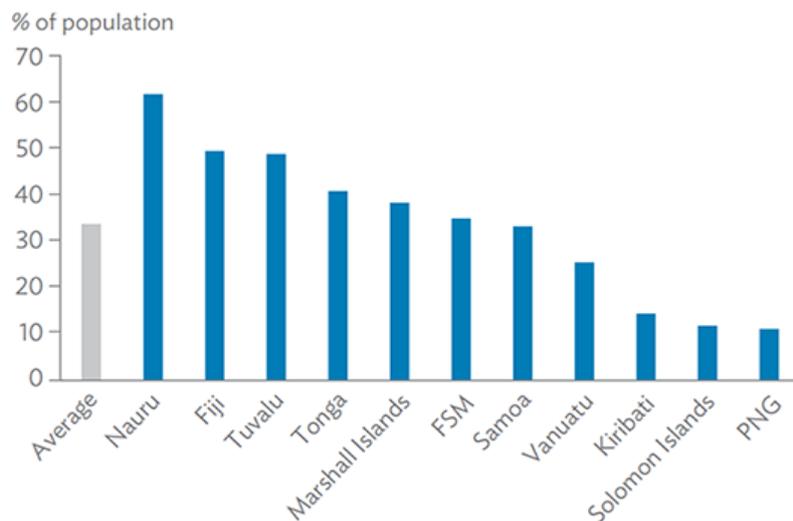
A survey of education ministry officials conducted by UNESCO, UNICEF, and the World Bank from April to October 2020 shows that online and take-home modules have been the primary modes of instruction in Pacific DMCs during the school closures. Given the geographical remoteness of many of these countries, distance learning via online platform provided the widest coverage for many students.

Pacific islanders often do not have access to TV or radio because of limited TV/radio stations and frequencies. Distribution of take-home learning packages can be difficult and expensive outside the main islands in the absence of reliable delivery services and logistics support.

Access to distance learning depends on households having the necessary equipment. Majority of households cannot access distance education via computers. For example, only 11% of households in Papua New Guinea have computer access.

Households are further constrained from online learning by lack of internet access. Only 4% of households in Samoa have internet access. In nearly every Pacific DMC, less than half of the population has ever used the internet.

Individuals in the Pacific DMCs Using the Internet, 2017



FSM = Federated States of Micronesia; PNG = Papua New Guinea.

Note: No data are available for the Cook Islands, Niue, and Palau.

Source: World Development Indicators.

While almost every household in developing Asia has a mobile phone, only 56% of homes in Papua New Guinea and 68% in Kiribati have one. On average, only 7 in 10 persons in the Pacific are using a mobile phone.

Moreover, the sudden closure of schools meant that teachers and primary caregivers (usually parents) had little time to prepare for distance learning. Many teachers had to reorient themselves and overhaul their teaching strategies to conform with distance learning platforms. Caregivers needed to juggle supervising their children's distance learning with other responsibilities, such as housework and working from home.

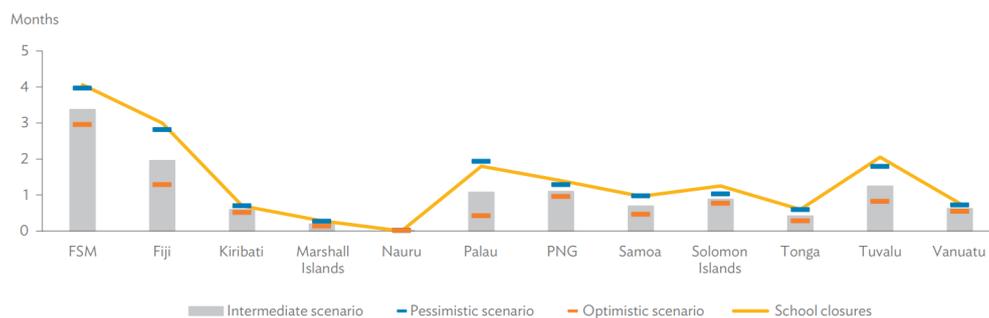
The unplanned nature, the involvement of younger-age children, and distractions at home make instruction under distance learning less effective than face-to-face delivery.

Learning Losses

Students incurred losses in learning during this period of school closures. The magnitude of these losses depended on the length of school closures as well as the effectiveness of distance learning strategies used.

On average, countries in the Pacific subregion lost 8.0% of a year of learning, equivalent to a full month's worth of learning in calendar year 2020. This was equivalent to 1.3% of the 6.6 years of learning that people in the Pacific acquired on average before the pandemic. Learning losses were highest in the Federated States of Micronesia, where schools have been partially or fully closed the longest, resulting in 3.4 months of learning lost. Fiji lost 2.0 months of learning and Tuvalu 1.2 months. Palau and Papua New Guinea each lost 1.1 months of learning. The rest of the Pacific DMCs lost less than 1 month of learning.

Months of Learning Lost in Pacific Developing Member Countries Because of School Closures, 2020



FSM = Federated States of Micronesia, PNG = Papua New Guinea.

Notes:

1. School closures are the number of days that schools are partially or fully closed, normalized by 365 days.
2. Each day of partial closure is assumed to be equivalent to half a day of full closure.
3. No data are available for Cook Islands and Niue.

Source: ADB. 2021. Learning and Earning Losses from COVID-19 School Closures in Developing Asia. *Asian Development Outlook 2021: Financing a Green and Inclusive Recovery*. Manila.

By keeping schools mostly open, Pacific DMCs have kept learning losses at bay. Even in the least-effective scenario of distance learning, the subregion lost only 1.3 months of learning, or 1.7% of the average months of learning in 2020. On the other hand, in South Asia where school closures have reached about 1 year, learning losses were equivalent to 6.6 months of learning, or 8.6% of the average months of learning that people in South Asia acquired before the pandemic.

Losses in Potential Earnings

Learning losses will influence the skills of students affected by school closures. In turn, this will affect their productivity in the future. In the long run, closure of schools in the Pacific in 2020 is estimated to result in a loss in future earnings equivalent to \$42 per year for every student affected. This is a 0.6% decline in their expected annual earnings. Over the lifetime of these students, the losses accrue to about \$247 million in present-value terms, equivalent to 3.7% of the subregion's GDP in 2020. Developing Asia stands to lose a total of \$1.25 trillion in lifetime earnings of students affected by school closures. This is equivalent to 5.4% of the region's GDP in 2020.

If the relatively short closure of schools during the pandemic resulted in these losses in learning and potential earnings, then longer or more frequent disruptions because of disasters may result in even bigger losses accumulated over time.

Recommendations

As the Pacific subregion is vulnerable to disasters, disruptions to physical classes are a frequent occurrence. In this respect, ICT can play an important role in making education resilient. This latest episode of school closures, though relatively short, revealed that the current state of its digital infrastructure is unable to support the continuation of education through distance learning.

Internet connectivity has already improved in the Pacific. But while many Pacific DMCs are now able to connect to the internet, a lot more either do not have access at all or can only connect intermittently because of poor quality. Many people continue to rely on satellite technology for internet connection, particularly those in far-flung islands, because of its broad coverage.

Submarine cables are more reliable in providing internet connectivity. But until the projects in the pipeline are installed and become fully operational, many will continue to be excluded from enjoying fast and affordable internet services. And students will still have poor access to viable distance learning.

Accelerating the integration of ICT in education requires policy actions, which include supporting effective use of education management information systems, establishing a subregional e-learning resource center to achieve scale economies, and delivering ICT training programs for education stakeholders. Another important impediment to ICT's integration in education is the lack of technical know-how. Capacity-building both on the supply and demand sides of education, complemented by reliable digital infrastructure, will be necessary to improve the resilience of education in the Pacific.

Resources

Asian Development Bank (ADB). 2021. *Pacific Economic Monitor: Charting Recovery through an Ocean of Uncertainty*. Manila.

ADB. 2021. Learning and Earning Losses from COVID-19 School Closures in Developing Asia. *Asian Development Outlook 2021: Financing a Green and Inclusive Recovery*. Manila.

ADB. 2018. *ICT for Better Education in the Pacific*. Manila.

UNESCO. 2021. Monitoring COVID-19 Caused Closures of Educational Institutions. *Education Sector Methodological Note*. 20 January.



Rhea M. Molato

Economics and Statistics Analyst, Economic Research and Regional Cooperation Department, ADB

Rhea works on labor economics, education, social protection, and innovation using microdata from household and firm surveys. Before joining ADB, she was with the Max Planck Institute for Tax Law and Public Finance where she worked on public debt and civil conflict. She received her PhD in Public Economics from the University of Munich in Germany.



Noel B. Del Castillo

Consultant, Pacific Department, ADB

Noel's work is focused on providing support in the economic and fiscal management of ADB's Pacific developing member countries. He is also a part-time lecturer in economics at Miriam College and at the University of the Philippines. He is a PhD candidate in Economics at the University of the Philippines.



Asian Development Bank (ADB)

The Asian Development Bank is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region.

Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Follow Asian Development Bank (ADB) on   

